

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 1 of 7

## Sodium Silicate, ~37%

### SECTION 1: Identification of the substance/mixture and of the supplier

**Product name:** Sodium Silicate, ~37%

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** S25566B

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Supplier Details:**

Fisher Science Education  
6771 Silver Crest Road, Nazareth, PA 18064  
(724)517-1954

**Emergency telephone number:**

**Fisher Science Education**  
Emergency Telephone No.: 800-535-5053

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



**Corrosive**



**Irritant**



**Health hazard**

Corr Metals. 1.  
Skin Corr. 1A.  
Eye Damage. 1.  
Specific Target. Organ tox. 3 (single exposure).  
Specific Target. Organ tox. 1 (repeated exposure).

**Signal word:** Danger

**Hazard statements:**

May be corrosive to metals.  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.  
Causes damage to organs through prolonged or repeated exposure.

**Precautionary statements:**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 2 of 7

### Sodium Silicate, ~37%

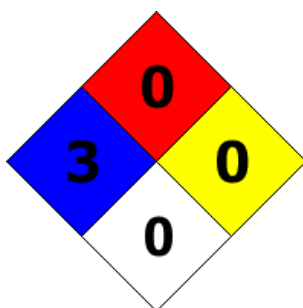
Keep only in original container.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Wash skin thoroughly after handling.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.  
Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
Specific treatment (see supplemental first aid instructions on this label).  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material damage.  
Store in a well ventilated place. Keep container tightly closed.  
Store locked up.  
Store in corrosive resistant stainless steel container with a resistant inner liner.  
Dispose of contents and container as instructed in Section 13.

#### Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

### SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 1344-09-8	Silicic acid, sodium salt	37 %
CAS 7732-18-5	Water, purified	63 %
Percentages are by weight		

### SECTION 4: First aid measures

#### Description of first aid measures

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 3 of 7

### Sodium Silicate, ~37%

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Immediately get medical assistance.

#### After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

#### After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.

#### After swallowing:

Induce vomiting if directed to do so by medical personnel. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

#### Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

#### Indication of any immediate medical attention and special treatment needed:

Provide SDS document to physician. Physician should treat symptomatically.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing agents:

Nonflammable. Use any means suitable for extinguishing surrounding fire.

##### Unsuitable extinguishing agents: None

#### Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

#### Advice for firefighters:

##### Protective equipment:

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

##### Additional information (precautions):

Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

#### Environmental precautions:

Collect contaminated soil for characterization per Section 13.

#### Methods and material for containment and cleaning up:

Dilute with water and absorb with suitable material and containerize for disposal. If necessary neutralize with dilute acetic acid solution. Avoid runoff into sewer. Always obey local regulations.

#### Reference to other sections: None

### SECTION 7: Handling and storage

#### Precautions for safe handling:

Avoid breathing vapors, mist, or gas. Use only in well ventilated areas. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Wash hands and exposed skin with soap and plenty of water.

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 4 of 7

### Sodium Silicate, ~37%

#### Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, and well-ventilated area. Store away from incompatible materials. Store away from food.

#### SECTION 8: Exposure controls/personal protection



##### Control Parameters:

7631-86-9, Silicon dioxide, USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts: 20 Million particles per cubic foot.  
7631-86-9, Silicon dioxide, USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts: 80mg/m<sup>3</sup> / %SiO<sub>2</sub>.  
7631-86-9, Silicon dioxide, USA. NIOSH Recommended Exposure Limits: 6 mg/m<sup>3</sup>.  
1310-73-2, Sodium hydroxide, USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000: 2 mg/m<sup>3</sup>.  
1310-73-2, Sodium hydroxide, USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants: 2 mg/m<sup>3</sup>.  
1310-73-2, Sodium hydroxide, USA. ACGIH Threshold Limit Values (TLV): 2 mg/m<sup>3</sup>.  
1310-73-2, Sodium hydroxide, USA. NIOSH Recommended Exposure Limits: 2 mg/m<sup>3</sup>.

**Appropriate Engineering controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

**Respiratory protection:** Use under a fume hood.

**Protection of skin:** Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

**Eye protection:** Safety glasses with side shields or goggles.

**General hygienic measures:** Avoid contact with the eyes and skin. Wash hands and exposed skin with soap and plenty of water. Wash hands before breaks and immediately after handling the product. Do not eat, drink, smoke, or use personal products when handling chemical substances.

#### SECTION 9: Physical and chemical properties

<b>Appearance (physical state, color):</b>	Colorless turbid liquid	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	Non Explosive Non Explosive
<b>Odor:</b>	Slight soapy odor	<b>Vapor pressure at 20°C:</b>	Not Available
<b>Odor threshold:</b>	No Information	<b>Vapor density:</b>	No Information
<b>pH-value:</b>	12.5	<b>Relative density:</b>	1.390 g/cm <sup>3</sup> at 20°C
<b>Melting/Freezing point:</b>	-1°C	<b>Solubilities:</b>	Soluble.
<b>Boiling point/Boiling range:</b>	101-102°C	<b>Partition coefficient (n-octanol/water):</b>	No Information

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 5 of 7

### Sodium Silicate, ~37%

<b>Flash point (closed cup):</b>	Not Applicable	<b>Auto/Self-ignition temperature:</b>	Not Applicable
<b>Evaporation rate:</b>	Not Available	<b>Decomposition temperature:</b>	Not Available
<b>Flammability (solid, gaseous):</b>	Not Applicable	<b>Viscosity:</b>	a. Kinematic: Not Available b. Dynamic: Not Available
<b>Density at 20°C:</b>	No Information		

### SECTION 10: Stability and reactivity

#### Reactivity:

Non-reactive under normal processing.

#### Chemical stability:

Stable under normal conditions.

#### Possible hazardous reactions:

None under normal processing.

#### Conditions to avoid:

Excessive heat. Incompatible materials.

#### Incompatible materials:

Gels when mixed with acids.

#### Hazardous decomposition products:

Contact with acids will cause gelling of the silicate and the evolution of some heat.

### SECTION 11: Toxicological information

#### Acute Toxicity:

##### Oral:

APS LD50 orl-rat: 1960mg/kg (Sodium silicate)

**Chronic Toxicity:** No additional information.

**Corrosion Irritation:** No additional information.

**Sensitization:** No additional information.

**Numerical Measures:** No additional information.

**Carcinogenicity:** No additional information.

**Mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

### SECTION 12: Ecological information

**Ecotoxicity:** No additional information.

#### Persistence and degradability:

Readily degradable in the environment.

**Bioaccumulative potential:** No additional information.

#### Mobility in soil:

Aqueous solution has high mobility in soil.

**Other adverse effects:** No additional information.

### SECTION 13: Disposal considerations

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 6 of 7

### Sodium Silicate, ~37%

#### Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal, state, provincial, and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

#### SECTION 14: Transport information

##### US DOT

##### UN Number:

ADR, ADN, DOT, IMDG, IATA

UN3266

##### Limited Quantity Exception:

None

##### Bulk:

**RQ (if applicable):** None

**Proper shipping Name:** Corrosive liquid, basic, inorganic, n.o.s. 8.

**Hazard Class:** None

**Packing Group:** III.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

##### Non Bulk:

**RQ (if applicable):** None

**Proper shipping Name:** Corrosive liquid, basic, inorganic, n.o.s. 8.

**Hazard Class:** None

**Packing Group:** III.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

#### SECTION 15: Regulatory information

##### United States (USA)

##### SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

##### SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

##### RCRA (hazardous waste code):

None of the ingredients are listed.

##### TSCA (Toxic Substances Control Act):

All ingredients are listed.

##### CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

##### Proposition 65 (California):

##### Chemicals known to cause cancer:

None of the ingredients are listed.

##### Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

##### Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

## Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.29.2014

Page 7 of 7

### Sodium Silicate, ~37%

#### Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

#### Canada

##### Canadian Domestic Substances List (DSL):

All ingredients are listed.

##### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

##### Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

### SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:** None

#### Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.  
PNEC Predicted No-Effect Concentration (REACH).  
CFR Code of Federal Regulations (USA).  
SARA Superfund Amendments and Reauthorization Act (USA).  
RCRA Resource Conservation and Recovery Act (USA).  
TSCA Toxic Substances Control Act (USA).  
NPRI National Pollutant Release Inventory (Canada).  
DOT US Department of Transportation.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
WHMIS Workplace Hazardous Materials Information System (Canada).  
DNEL Derived No-Effect Level (REACH).

**Effective date:** 12.29.2014

**Last updated:** 06.17.2015